# Appendix N

## **GLOSSARY**

May, 2001



## **Glossary**

## AASHTO - American Association of State Highway and Transportation Officials

#### ACE - Alameda Corridor East

#### ADA - American with Disabilities Act

A federal act that prohibits discrimination against all individuals with disabilities. With certain statutory exceptions, public and private entities providing fixed route or demand responsive transportation services must acquire accessible vehicles or provide equivalent service to individuals with disabilities.

## Air Quality Management District (AQMD)

A regional agency which adopts and enforces regulations to achieve and maintain state and federal air quality standards.

## Air Quality Management Plan (AQMP)

The plan for attaining state air quality as required by the California Clean Air Act of 1988. It is adopted by air quality districts and subject to approval by the California Air Resources Board.

## Appropriation

Legislation that allocates budgeted funds from general revenue to programs that have been previously authorized by other legislation. The amount of money appropriated may be less than the amount authorized.

#### Apportionment

At the federal level, approval by the Office of Management and Budget for an agency to spend funds appropriated by Congress. Public reporting of the OMB approved apportionment, detailing the amount of transit funding available to each urbanized area or designated recipient, is done by FTA.

#### ARB - Air Resource Board

## ATIS - Advanced Traveler Information Systems

## ATMS - Advanced Traffic Management Systems

## Authorization

Federal legislation that creates the policy and structure of a program including formulas and guidelines for awarding funds. Authorizing legislation may set an upper limit on program spending or may be open ended. General revenue funds to be spent under an authorization must be appropriated by separate legislation.

## Average Daily Traffic (ADT)

The average number of vehicles passing a specified point during a 24-hour period.

## AVR - Average Ridership

### California Air Resources Board (CARB)

Designated by EPA as having responsibility for the implementation of the federal Clean Air Act, State Implementation Plan, and approving air quality attainment plans as required by the State Clean Air Act of 1988. Under State law, CARB established state air quality standards and vehicle emissions requirements.

### California Clean Air Act (AB2595, Sher)

Enacted in 1988, the Act: (1) establishes a legal mandate to achieve California's ambient air quality standards by the earliest practicable date; (2) prescribes a number of emission reduction strategies and requires annual progress in cleaning up the air; and (3) grants authority to the state's local air pollution control districts to adopt and enforce transportation control measures (TCMs)

## California Environmental Quality Act (CEQA)

Enacted in 1970, CEQA provides the State's environmental guidelines by which land use development and management decisions are premised. CEQA specifies the State's environmental review process and applicable environmental policies.

## California State Department of Transportation (CALTRANS)

As owner/operator of the state highway system, responsible for its safe operation and maintenance. Proposes projects for Intercity Rail, Interregional Roads, and soundwalls in the PSTIP. Caltrans is also responsible for the HSOPP, Toll Bridge, and Aeronautics programs. The TSM and State/Local Partnership Programs are administered by Caltrans. Caltrans is the implementing agency for most state highway projects, regardless of program, and for the Intercity rail program.

## California Transportation Commission (CTC)

A body appointed by the Governor and confirmed by the legislature that review Regional Transportation Improvement Programs (RTIPs) and the PSTIP. This qualifies the projects for state funding. The CTC also has financial oversight over the major programs authorized by propositions 111 and 108.

## Capital Improvement Program (CIP)

The CIP is a seven year program of projects to maintain or improve traffic level of service and transit performance standards developed by the Congestion Management Program (CMP), which conforms to transportation-related vehicle emissions air quality mitigation measures.

CBA - Cost Benefit Analysis

CEA - Cost Effectiveness Analysis

C/E - Cost/Effectiveness

CEHD - Community, Economic and Human Development Committee

COG - Council of Government

#### Commuter Rail

Form of passenger transportation characterized by medium distance home-to-work passenger travel, multiple ride ticketing, recurring peak-hour travel and use of high-density seating.

### **Conformity**

The Federal Clean Air Act requires transportation plans, programs, and projects to conform to applicable state implementation plans. Metropolitan Planning Organizations (MPOs) and the U.S. Department of Transportation must make a determination of conformity for transportation plans and programs. The conformity determination must be based on recent estimates of emissions, and such estimates must be based on the most recent population, employment, travel and congestion estimates as determined by the MPO.

## Congestion Management Agency (CMA)

The agency responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.

### Congestion Management Program (CMP)

A legislatively required county-wide program which addresses congestion problems.

## Congestion Management System (CMS)

Required by ISTEA to be implemented by states to improve transportation planning.

## Congestion Mitigation Air Quality Program (CMAQ)

Part of ISTEA, this is a funding program designed for projects that contribute to the attainment of air quality goals.

#### Congestion Pricing

User fee imposed on vehicles during peak demand periods on congested roadways.

#### **Constant Dollars**

Dollars expended/received in a specific year adjusted for inflation/deflation relative to another time period.

#### CO - Carbon Monoxide

#### **Corridor**

Any major transportation route that includes parallel limited access highways, major arterials, or transit lines. With regard to traffic incident management, a corridor may include more distant transportation routes that can serve as viable alternatives to each other in the event of traffic incidents.

### **County Minimums**

The minimum share of programming each county should receive Under this statute (Section 188.8, Streets and Highways Code), 70 percent of capital outlay funds must be expended in each county according to a formula based 75 percent on county population and 25 percent on centerline state highway miles in the county. The county minimum is accounted for over a fixed five-year period.

#### **Current Dollars**

Actual dollars expended/received in a specific year without adjustments for inlation/deflation.

## CVO - Commercial Vehicle Operations

#### Demand Volume

The traffic volume expected to desire service past a point or segment of the highway system at some future time, or the traffic currently arriving or desiring service past such a point, usually expressed as vehicles per hour.

#### Demonstration Projects

ISTEA includes funding earmarked for specified projects.

## Department of Transportation (DOT)

Federal governmental agency that includes the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

### DTIM - Direct Travel Impact Model

### EDF - Environmental Defense Fund

#### EMFAC 7G - Emission Factor

## Environmental Protection Agency (EPA)

The federal agency charged with protecting the environment.

#### FAA - Federal Aviation Administration

#### Federal Highway Administration (FHWA)

Agency responsible for the approval of transportation projects that affect the federal highway system. Administratively, it is under DOT and is the sister agency of FTA.

## Federal Transit Administration (FTA)

The federal Department of Mass Transportation which is under DOT, and sister agency of FHWA.

#### Financially Constrained

Expenditures are said to be financially constrained if they are within limits of anticipated revenues.

## Fixed Guideway System

A passenger rail system including but not limited to commuter rail and intracity rail (light rail and heavy rail), intercity rail, monorail, and magley. Both the light rail and heavy rail technologies.

#### Flexible Congestion Relief (FCR)

One of the State's funding programs for local or regional transportation projects to reduce congestion. State highway projects, local roads, and rail guideway projects are all eligible.

## FRA - Federal Railroad Administration

#### FTA Section 3 Funds

Discretionary capital funds provided by the federal government through FTA. New Rail Starts and Extensions are funded through this program, which operates through earmarking at the Congressional level. Other Section 3 categories are Rail Modernization (formula-based) and Bus and Bus Facilities (discretionary). Minimum local match is 20 percent. Projects meeting the mandates of the Americans with Disabilities Act or Federal Clean Air Act are funded on a 90 percent federal - 10 percent local basis.

#### FTA Section 8 Funds

Transit operating funds provided by the federal government through FTA. Originally made available through Section 8 of the Urban Mass Transportation Act, and continued under ISTEA, Section 8 funds are available for planning components of the operating budget, such as development of Short Range Transit Plans. Projects meeting the mandates of the Americans with Disabilities Act of Federal Clean Air Act are funded on a 90 percent federal - 10 percent local basis.

## FTA Section 9 Program Funds

Funding provided by the federal government through FTA. Capital projects must be matched with local capital funds on an 80 percent federal / 20 percent local basis. Projects meeting the mandates of the Americans with Disabilities Act or Federal Clean Air Act are funded on a 90 percent federal/10 percent local basis, subject to DOTs discretion. A portion of Section 9 funds can be used to support annual operating budgets on a 50 percent federal/50 percent local basis. The total amount of Section 9 used for operating funds is determined by Congress each year and divided among regions on a formula basis. Projects meeting mandates of the Americans With Disabilities Act or Federal Clean Air Act are funded on a 90 percent federal/20 percent local basis.

## Fund Estimate

The STIP cycle begins with the development of a State Fund Estimate by Caltrans, which compares existing commitments against total estimated revenue expected from state and federal sources. Caltrans estimates state and federal funds "reasonably expected" in annual increments for seven years (the STIP period). The calculation of existing capital program commitments is based on Caltrans' Project Delivery Report, while non-capital expenditures of operation and administration costs are estimated based on current spending and projected needed. This comparison of revenues to commitments results in an estimate of total uncommitted funds that are available for programming and prorated to each program category. The fund Estimate is required by law to be submitted by July 15 of odd-numbered years, and to be adopted by the CTC by August 15 of odd-numbered years. CTC adopts a "Fund Estimate Methodology" to guide Caltrans in formulating the Fund Estimate.

GARVEE - Grant Anticipation Revenue Vehicles

GIS - Geographic Information System

GMAC - Goods Movement Advisory Committee

GNP - Gross National Product

### **Grade Crossing**

A crossing or intersection of highways, railroad tracks, other guideways, or pedestrian walks, or combinations of these at the same level or grade.

## Gross Vehicle Weight (GVW)

Weight in pounds of the chassis of a truck or truck tractor with lubricants, radiator full of water, full fuel tank plus the weight of the cab or driver's compartment, body, special chassis and body equipment and pay load as authorized by the chassis manufacturer.

## Heavy Duty Trucks (HDT)

Heavy duty vehicles with a gross vehicle weight (GVW) of 8,500 pounds and higher.

## Heavy Rail

Heavy rail vehicles cannot operate on surface streets but must have exclusive grade protected guideways, such as subway, at surface or aerial configuration. Heavy rail vehicles can operate in pairs or as a multiple car set of up to ten cars and powered by third rail or overhead catenary. Heavy rail systems must have platforms for boarding passengers. A heavy rail system can carry up to 40,000 passengers per hour in each direction.

### High Occupancy Vehicle Lane (HOV)

A lane of freeway reserved for the use of vehicles with more than a preset number of occupants; such vehicles often include buses, taxis and carpools.

## Highway Assignment

This is the process by which the vehicle trip tables are assigned to the highway networks for four periods: AM, midday, PM and night periods.

#### Highway Capacity Manual (HCM)

Revised in 1985 by the Transportation Research Board of the National Research Council, the HCM presents various methodologies for analyzing the operation (see Level of Service) of transportation systems as freeways, arterials, transit, and pedestrian facilities.

## Highway Network

Abstraction of the street system made of links to represent roadways and nodes to represent intersections and other points of access.

#### Home-Based Work Trips

Home-based work trips include telecommuting, working at home and non-motorized transportation work trips.

## HOT Lanes - High Occupancy Toll Lanes

#### Hours of Delay (HOD)

HOD represents the travel time spent on the highways due to congestion. Delay is estimated as the difference between vehicle hours traveled at free flow speed and vehicle hours traveled at congestion speed.

## HPMS - Highway Performance Monitoring System

## ICAPCD - Imperial County Air Pollution Control District

## *Infrastructure*

The basic facilities, equipment, services, and installations needed for the growth and functioning of a community.

### Intelligent Transportation System (ITS)

ISTEA establishes an ITS Program to enhance the capacity, efficiency, and safety of the federal-aid highway system and to serve as an alternative to additional physical capacity. Automated highways and vehicles are one component of this approach. ITS includes development of application of electronics, communications or information processing (including advanced traffic management systems, commercial vehicle operations, advanced traveler information systems, commercial and advanced vehicle control systems, advanced public transportation systems, satellite vehicle tracking systems, and advanced vehicle communications systems) used singly or in combination to improve the efficiency and safety of surface transportation systems.

## Intercity Rail

Operated by common carriers and used fixed guideways. The service is characterized by inter-regional passenger travel, provision for personal carry-on baggage, and possible use of specialized cars for food service, sleeping accommodations, checked baggage, and package express.

#### Intermodal

a unifying, integrated national network of travel modes emphasizing connections between modes, choices among them, and coordination and cooperation among transportation interests.

#### Intermodal Surface Transportation Efficiency Act (ISTEA)

Federal legislation and funding program adopted in 1991. It provides increased funding and program flexibility for multi-modal transportation programs.

#### Intracity Rail

Intracity rail is high capacity, high speed transit that consists of either light rail or heavy rail vehicles. These vehicles are electric-powered from overhead for third rail powered lines. The distinction between light rail and heavy rail is capacity and operating configuration.

IVAG - Imperial Valley Association of Governments

JPA - Joint Powers Authority

LACMTA - Los Angeles County Metropolitan Transportation Authority

LAUPT - Los Angeles Union Passenger Terminal

LEM - Location Efficient Mortgage

## Level of Service (LOS)

A qualitative measure of describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

### Light Rail

Light rail vehicles can operate as single vehicles or as a multiple car set and frequently operate on surface streets as well as on exclusive rights-of-way, and draw electric power from an overhead catenary system. Light rail systems can have a passenger boarding at surface as in San Diego and Sacramento or from elevated platforms as in Los Angeles. Maximum capacity of a light rail system is generally 10,000 passengers in each direction.

#### Livable Communities

"Livable Communities" are those that are pedestrian and transit friendly environments that will be achieved through local government building and design standards, and private builders' implementation.

## Metropolitan Planning Organizations (MPOs)

Federally designated organizations for urbanized areas of greater than 50,000 population mandated to carry out transportation planning as required by ISTEA.

### Major Investment Study (MIS)

A Major Investment Study is the preliminary study including preliminary environmental documentation for choosing alternative transportation projects for federal transportation funding. An MIS is a requirement, which is conducted cooperatively by the study sponsor and the metropolitan planning organization.

#### Maglev

Magnetic levitation (maglev) trains carry passengers in a manner similar to that of intercity rail (Amtrak). Maglev prototypes in Germany and Japan have logged thousands of miles at speed of up to 260 miles per hour.

## MAP - Million Annual Passengers

#### **Market Incentives**

Measures designed to encourage certain actions or behavior. These include inducements for the use of carpools, buses and other High-Occupancy Vehicles in place of single-occupant automobile travel. Examples include HOV lanes, preferential parking and financial incentives.

#### MDAB - Mojave Desert Air Basin

## MDAQMD - Mojave Desert Air Quality Management District

#### Mixed Flow

Traffic movement having autos, trucks, buses and motorcycles sharing traffic lanes.

#### Mode

A particular form of travel (e.g. Walking, traveling by automobile, traveling by bus or traveling by train.)

#### Mode Choice

Mode choice determines the distribution of person trips among the various modes of transportation available in a model.

#### Model

(1) A mathematical or conceptual presentation of relationships and actions within a system. It is used for analysis of the system or its evaluation under various conditions; (2) A mathematical description of a real-life situation that uses data on past and present conditions to make a projection about the future.

#### Model, Land Use

A model used to predict the future spatial allocation of urban activities (land use), given total regional growth, the future transportation system, and other factors.

#### Model, Mode Choice

A model used to forecast the proportion of total person trips on each of the available transportation modes.

## Mode Split

The proportion of total person trips using various specified modes of transportation.

## MTS - Metropolitan Transportation System

#### Multi-Modal

A mixture of several modes of transportation – transit, highways, non-motorized, etc.

## NAFTA - North American Free Trade Agreement

 $NO_X$  - Nitrogen Oxides

NO<sub>2</sub> - Nitrogen Dioxide

#### ONTRAC - Orange North America Trade Rail Access Corridor

## **Operational Improvement**

Capital improvement for installation of traffic surveillance and control equipment, computerized signal systems, motorist information systems, integrated traffic control systems, incident management programs, and transportation demand management facilities, strategies and program and other capital improvements to public roads. This does not include resurfacing, restoring, or rehabilitating capital improvement to public roads. This does not include resurfacing, restoring, or rehabilitating improvements, construction of additional lanes, interchanges, grade separation, or the construction of a new facility at new location.

## Origin-Destination (O-D)

Information used in studying traveler-behavior and travel demand.

## OWP - Overall Work Program

### **O&M** - Operation and Maintenance

#### Peak (Peak Period, Rush Hours)

(1) The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon (p.m.) peak; (2) The period when demand for transportation service is the heaviest.

## Peer Review Committee (PRC)

An "informal" committee of technical experts usually organized and invited to review and comment on various technical issues and processes used in the planning process. These committees are useful in sharing experiences in various planning issues and in developing consensus on how to address various technical issues.

## Person Trip

A trip made by any mode or combination of modes for any purpose.

#### PHT - Person Hours Traveled

#### PM 10

Particulate matters in size of 10 microns or less.

## PNP - Public Non-Profit

## Proposed State Transportation Improvement Program (PSTIP)

This seven-year program is based on the adopted STIP and the most recent Delivery. It is developed by Caltrans for CTC and includes projects developed through the IRRS, Sound Wall, Toll Bridge, and Aeronautics programs.

#### PSR - Project Study Report

## PUC - Public Utilities Commission

## Regional Transportation Improvement Program (RTIP)

List of proposed transportation projects submitted to the CTC by the regional transportation planning agency as a request for state funding. Individual projects are first proposed by local jurisdictions, then evaluated and prioritized by the regional agency for submission to the CTC. The RTIP has a seven-year planning horizon, and is updated every two years.

## Regional Transportation Plan (RTP)

A comprehensive 20-year plan for the region, updated every two years by the regional transportation planning agency. The RTP includes goals, objectives, and policies, and recommends specific transportation improvements.

### Regional Transportation Planning Agency (RTPA)

The agency responsible for the preparation of RTPs and RTIPs and designated by the State Business Transportation and Housing Agency to allocate transit funds. RTPAs can be local transportation commissions, COGs, MPOs, or statutorily created agencies.

### RHNA - Regional Housing Needs Assessment

ROG - Reactive Organic Gas

#### **RSA**

Largest zone level in a model, comprised of aggregates of census travel levels.

## RSTP - Regional Surface Transportation Program

RTMS - Regional Transportation Monitoring System

SANBAG - San Bernardino Association of Governments

SCAB - South Coast Air Basin

SCAQMD - South Coast Air Quality Management District

SCCAB - South Central Coast Air Basin

#### Screenline

Imaginary line which is drawn across streets and freeways, and is used to track and record traffic volumes at the points where the screenline intersects the facility.

#### SCRRA - Southern California Regional Rail Authority

#### **SED**

SCAG's socio-economic data; often referred to as the population, employment and housing forecast.

## SHOPP - State Highways Operation and Protection Plan

## SIP - State Implementation Plan

Southern California Association of Governments (SCAG)

Southern California Association of Governments is the metropolitan planning organization (MPO) for six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. As the designated MPO, the Association of Governments is mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the state level.

#### SOV

Single Occupancy Vehicle.

 $SO_X$  - Sulfur Dioxide

SSAB - Salton Sea Air Basin

STA - State Transit Assistance

## State Implementation Plan (SIP)

Required by the Federal Clean Air Act to attain and maintain national ambient air quality standards. It is adopted by local air quality districts and the State Air Resources Board.

## State/Local Partnership

Originally created by SB 140, and subsequently funded by the passage of Proposition 111 in June 1990, the State/Local Partnership program provides state matching funds for locally funded and constructed highway and exclusive public mass transit guideway projects. Over \$2 billion has been designated for this program for 10 years. Eligible projects are defined by the legislation and clarified by guidelines published by the Caltrans Division of Local Streets and Roads. Applications are submitted annually to Caltrans by June 30 for the following fiscal year. The amount of State match available in a given year is dependent on the number of eligible applicants and the size of the appropriation to the program by the legislature during the budget process. The state match cannot exceed 50 percent.

### State Transit Assistance (STA)

Provides funding for mass transit and transportation planning, with half of the revenues transferred to the TP&D Account and appropriated to STA. STA apportionments to regional transportation planning agencies are determined by two formulas: 50 percent by populations and 50 percent by the amount of operator revenues (fares, sales tax, etc.) for the prior year. STA funds may be used for transit capital or operating expenditures. Passage of Proposition 116 disallows use of STA funds for streets and roads in non-urban counties.

#### State Transportation Improvement Program (STIP)

A list of transportation projects, proposed in RTIPS and the PSTIP, which are approved for funding by the CTC.

#### Surface Transportation Program (STP)

Flexible funding program established by ISTEA. Many types of mass transit and highway projects are eligible for funding under this program. Ten percent of the projects funded under this program must be transportation enhancement activities and 10 percent safety projects.

## TAC - Technical Advisory Committee for the RTP

## TANN - Travel Advisory News Network

#### TAZ - Traffic Analysis Zone

The zone system is used to describe the urban activity in an area of land. TAZ's are the finest zone levels in a model, and are at the census tract or census block level.

#### TCC - Transportation and Communications Committee

### TCRP - The Governor's Traffic Congestion Relief Program

### TDA - Transportation Development Act

### TDM - Transportation Demand Management

## TEA-21 (Transportation Enhancement Act for the 21st Century)

Superseded ISTEA and authorized highway, highway safety, transit and other surface transportation programs through 2004. TEA-21 builds on the initiatives established under ISTEA, combining the continuation and improvement of current programs with new initiatives. These programs re designed to improve safety as traffic congestion continues to increase; protect and enhance communities and natural environment as transportation systems are provided; and advance America's economic growth and competitiveness domestically ad internationally through efficient and flexible transportation.

## Transit Capital Improvement Program (TCI)

Annual State program, funded primarily from the TP&D account for transit capital projects. All State funds must be matched by 50 percent local funds.

### Transportation Control Measures (TCMs)

Measures intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage.

## Transportation Management Area (TMA)

As defined by ISTEA, a TMA is designated by the Secretary of Transportation for all urbanized area over 200,000. TMAs must include a congestion management system in their planning process. In TMAs, MPOs are responsible for project selection with the exception of NHS, bridge and interstate maintenance projects.

#### Transportation Planning and Development Account (TP&D)

A state account funded by sales tax on the nine cent gas tax and diesel sales tax that is the primary funding source for the TCI program.

#### Transportation Systems Management (TSM)

Relatively low-cost techniques to relieve congestion without adding vehicle capacity to the transportation system. Some are "demand-based" techniques such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of peak hours. (Demand-based strategies are sometimes referred to as TDMs). Other TSM measures are engineering-oriented, such as timing traffic signals to smooth the flow of traffic, and ramp metering, which regulate the entrance of vehicles onto a freeway, increasing its efficiency.

### Trip Distribution

Procedure in which zone to zone travel interchanges are developed based on magnitude of trip production and attractions by each zone.

### Urban and Commuter Rail (U/C Rail)

A new state funding program financed by the sales of bonds authorized by Proposition 108. All projects must be matched by 50 percent local funds. Projects are proposed to regional agencies through the CMP process; agencies may then include them in their RTIPs.

#### Urbanized Area

An area with a population of 50,000 or more as designated by the U.S. Census Bureau, within boundaries to be fixed in a cooperative effort by responsible state and local officials.

## Urban Transportation Planning System (UTPS)

A tool for multimodal transportation planning developed by the urban Mass Transit Administration (now the Federal Transit Administration) and the Federal Highway Administration. It is used for both long and short-range planning, particularly system analysis and covers both computerized and manual planning methods. UTPS consists of computer programs, attendant documentation, user guides, and manuals that cover one or more of five analytical categories: highway network analysis, transit network analysis, demand estimation, data capture and manipulation, and sketch planning.

## VC - Ventura County

### VCTC - Ventura County Transportation Commission

## Vehicle Miles Traveled (VMT)

Travel demand forecasting (modeling) is used to generate the average trip lengths for a region. The average trip length measure can then be used in estimating vehicle miles of travel, which in turn is used in estimating gasoline usage or mobile source emissions of air pollutants.

## Vehicle Occupancy

The number of people aboard a vehicle at a given time, also known as auto or automobile occupancy when the reference is to automobile travel only.

## Vehicle Trip

A one-way movement of a vehicle between two points.

VHT - Vehicle Hours of Travel.

**VOC - Volatile Organic Compounds** 

UP - Union Pacific Railroad

USDOT - United States Department of Transportation